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EXAMINER

REZA, MOHAMMAD W

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

1. This is in response to the arguments filed on 12/29/2008.
2. Claims 1-15, and 26-50 are pending in the application.
3. Claims 1-15, and 26-50 have been rejected.

Response to Amendment

4. The examiner approves the amendments made to claims 1, and 40-50.
5. The examiner withdraws the specification objection, 101 rejection and 112 rejections as necessary amendment and explanation has been provided.

Response to Arguments

6. Applicant's arguments filed on 12/29/2008 have been fully considered but they are not persuasive.

Applicant argues that the combined teachings of Johnson, and Alve does not disclose, "not encrypting a portion of digital content, less than the entire digital content format representing that media stream, the portion of the digital content that is not encrypted being sufficient for conducting navigation operations on, without decrypting, the media stream represented by the digital content". In favor of supporting this argument, applicant mentions in his remarks (dated: 12/29/2008) that Alve's description of manipulation of the MPEG-2 transport packets does not teach conducting navigation operations on, without decrypting, the media stream represented by the digital content and he has no suggestion that this method could be used to navigate the underling media stream represented by the MPEG-2 transport stream. After carefully reviewing

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Alve's invention, examiner respectfully traverses applicant's arguments as they are not persuasive. According to the Spec. and claim 27 of the present application "the navigation operation includes at least one of a rewind operation, fast forward operation, a movement operation to selected location within the digital content, a pause operation". Therefore, the broadest reasonable interpretation to any ordinary skill in the art of the claim is that the not encrypted portion being sufficient for conducting the navigation operation (fast forward, rewind operation) without decrypting of the media stream of digital content. Alve's invention teaches the clear portion (not encrypted portion) of the digital data stream of the digital broadcasts contents is to facilitate ancillary functions such as fast forward, fast rewind and program search (navigation operation) (See, Alve, abstract). The same teaching Alve repeats that the unencrypted portion of the media stream facilitates to scan the file (media stream) for fast forward and fast rewind (navigation operation) without need to decryption by the recorder (col. 4, lines 30-48). Therefore, it is evidentiary that Alve disclose the argued claimed portion and thus the rejection sustains.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. Claims 1-15, and 26-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al hereafter Johnson (European Patent Application EP 0792041 A2) in view of Alve et al hereafter Alve (US Patent 6959090).

11. As per claim 1, Johnson discloses a method, including steps of encoding a media stream into a digital content format representing that media stream; encrypting a portion of that digital content, less than the entire digital content format representing that media stream, the portion of the digital content that is encrypted being required for presentation of the media stream (Fig. 1, abstract 57, col. 2, lines 46-58); not encrypting a portion of that digital content, less than the entire digital content format representing that media stream (Fig. 1, abstract 57, col. 5, lines 8-15). Johnson does not expressly disclose the portion of the digital content that is not encrypted being necessary and sufficient for conducting navigation operations on, without decrypting, in the media stream represented by the digital content. However, in the same field of endeavor, Alve discloses the portion of the digital content that is not encrypted being sufficient for conducting navigation operations on, without decrypting, in the media stream represented by the digital content (abstract, col. 4, lines 31-47).

Accordingly, it would be obvious to one of ordinary skill in the network security art at the time of invention was made to have incorporated Alve's teachings of using the unencrypted portion to navigate the media stream with the teachings of Johnson, for the purpose of suitably using the block encryption procedure to more securely transferring the digital content (abstract, col. 4, lines 31-47).

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12. As per claim 2, Johnson does not disclose a method, wherein said steps of encoding provide an MPEG encoding of at least some video data. However, Alve discloses wherein said steps of encoding provide an MPEG encoding of at least some video data (abstract, col. 4, lines 31-47).

The same motivation that was utilized in the combination of claim 1 applies equally as well to claim 2.

13. As per claim 3, Johnson discloses a method wherein said steps of encrypting include steps of encrypting at least some audio or video data using a block-substitution cipher (col. 2, lines 35-40).

14. As per claim 4, Johnson discloses a method wherein said steps of encrypting include steps of encrypting at least some audio or video data using a block- substitution cipher; and refraining from encrypting at least some audio or video data using that block-substitution cipher, wherein an amount of audio or video data not encrypted is less than a block size for that block-substitution cipher (col. 4, lines 17-24).

15. As per claim 5, Johnson discloses a method wherein said steps of encrypting include steps of identifying at least a first set of data and a second set of data in the digital format; and separately encrypting the first set of data and the second set of data; whereby the first set of data can be made available to a first set of users and the second set of data can be made available to a second set of users, the first set of users being distinguishable from the second set of users (col. 9, lines 5-20).

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16. As per claim 6, Johnson discloses a method wherein said steps of encrypting include steps of refraining from encrypting formatting information (col. 3, lines 15-19, col. 7, lines 49-58).

17. As per claim 7, Johnson discloses a method wherein the digital content format includes at least some audio or video data and at least some formatting information (col. 2, lines 35-40).

18. As per claim 8, Johnson discloses a method wherein a method wherein the digital content format representing that media stream includes a set of layers, each relatively higher-level layer representing an abstraction for which each relatively lower-level layer represents an implementation thereof; a first set of relatively higher-level layers represent audio or video information for the media stream, while a second set of relatively lower-level layers represent techniques by which that information is formatted or supplemented; and the step of encrypting is applied only to that portion of the digital content representing audio and video information (col. 12, lines 22-50).

19. As per claim 9, Johnson discloses a method wherein the digital content format representing that media stream includes a set of layers, each relatively higher-level layer representing an abstraction for which each relatively lower-level layer represents an implementation thereof; a first set of relatively higher-level layers represent audio or video information for the media stream, while a second set of relatively lower-level layers represent techniques by which that information is broken into packets, indexed, multiplexed, or supplemented with metadata; and the step of encrypting is applied only

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to that portion of the digital content representing audio and video information (col. 6, lines 31-58).

20. As per claim 10, Johnson discloses a method wherein the digital content format representing that media stream includes a set of layers, each relatively higher-level layer representing an abstraction for which each relatively lower-level layer represents an implementation thereof; a first set of relatively higher-level layers represent audio and video information for the media stream, while a second set of relatively lower-level layers represent techniques by which that information is broken into packets, indexed, multiplexed, or supplemented with metadata; and the step of encrypting is not applied to that portion of the digital content representing other than audio and video information (col. 6, lines 31-58).

21. As per claim 11, Johnson discloses a method wherein the media stream includes at least one of: still media, an illustration (col. 5, lines 22-36).

22. As per claim 12, Johnson discloses a method wherein including steps of selecting that portion of the digital content for encryption so there is no substantial change in distribution of that digital content (col. 8, lines 31-50).

23. As per claim 13, Johnson discloses a method wherein said steps of selecting include ensuring there is no substantial change in packetization of a set of digital data in that digital content (col. 8, lines 31-50).

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24. As per claim 14, Johnson discloses a method wherein said steps of selecting include ensuring there is no substantial change in synchronization of audio with video portions of the media stream (col. 8, lines 31-50).

25. As per claim 15, Johnson discloses a method wherein said steps of selecting include ensuring there is no substantial change in length of at least some identifiable audio or video data in that digital content (col. 8, lines 31-50).

26. As per claim 26, Johnson discloses a method including steps of encoding a media stream into a digital content format representing that media stream, that digital content format having a set of information nodes, those information nodes being disposed in at least a partial ordering; encrypting a portion of that digital content, the portion being encrypted less than the entire digital content format representing that media stream, the portion of the digital content that is encrypted being required for presentation of the media stream (Fig. 1, abstract 57, col. 2, lines 46-58); wherein the unencrypted portion of that digital content is substantially closed in a direction under that partial ordering (Fig. 1, abstract 57, col. 5, lines 8-15). Johnson does not expressly disclose whereby it is possible to navigate the unencrypted portion of that digital content without having to decrypt it. However, Alve discloses whereby it is possible to navigate the unencrypted portion of that digital content without having to decrypt it (abstract, col. 4, lines 31-47).

The same motivation that was utilized in the combination of claim 1 applies equally as well to claim 26.

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27. As per claim 27, Johnson does not disclose a method wherein those navigation operations include at least one of: a rewind operation, a fast forward operation, a movement operation to a selected location within the digital content, a pause operation, a halt operation. However, Alve wherein those navigation operations include at least one of: a rewind operation, a fast forward operation, a movement operation to a selected location within the digital content, a pause operation, a halt operation (abstract, col. 4, lines 31-47).

The same motivation that was utilized in the combination of claim 1 applies equally as well to claim 27.

28. As per claim 28, Johnson discloses a method wherein the encrypted version of that digital content is substantially unchanged in formatting parameters from an unencrypted version of that digital content (col. 8, lines 31-50).

29. As per claim 29, Johnson discloses a method including steps of encrypting substantially all of that digital content using second steps of encryption, those second steps of encryption being relatively less secure than those steps of encrypting a portion of that digital content (col. 8, lines 31-50).

30. As per claim 30, Johnson discloses a method wherein those steps of encrypting only a portion include steps of encrypting only packet payloads when the digital content format is one of the group: an MPEG encoding, a variant of an MPEG encoding (col. 6, lines 31-58).

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31. As per claim 31, Johnson discloses a method including steps of importing a media stream in a first digital content format, that first digital content format having at least a portion of that media stream encoded in a digital content format, at least a portion of that digital content format being encrypted; decrypting that encrypted portion of that digital content format; encoding that media stream into a second digital content format, those steps of encoding including those steps of encrypting a portion of that digital content and those steps of not encrypting a portion of that digital content (Fig. 1, abstract 57, col. 5, lines 8-15).

32. As per claim 32, Johnson discloses a method including steps of importing a media stream in a first digital content format, that first digital content format having at least a portion of that media stream encoded in a digital content format, at least a portion of that digital content format being encrypted; wherein those steps of encrypting a portion of that digital content include steps of decrypting only a portion of that digital content (col. 9, lines 5-20).

33. As per claim 33, Johnson discloses a method wherein those steps of decrypting only a portion of that digital content include steps of decrypting only formatting information within that digital content (col. 4, lines 17-24).

34. As per claim 34, Johnson discloses a method wherein those steps of not decrypting a portion of that digital content include steps of not decrypting metadata (col. 4, lines 17-24).

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35. As per claim 35, Johnson discloses a method wherein those steps of not decrypting a portion of that digital content include steps of not decrypting data necessary and sufficient for browsing or searching within a library of files (col. 2, lines 35-40).

36. As per claim 36, Johnson discloses a method wherein including steps of encrypting substantially all of that digital content using second steps of encryption, those second steps of encryption being relatively less secure than those steps of encrypting a portion of that digital content (col. 8, lines 31-50).

37. As per claim 37, Johnson discloses a method wherein the encrypted version of that digital content is substantially unchanged in formatting parameters from an unencrypted version of that digital content (col. 8, lines 31-50).

38. As per claim 38, Johnson discloses a method wherein those navigation operations include at least one of: a rewind operation, a fast forward operation, a movement operation to a selected location within the digital content, a pause operation, a halt operation (Fig. 1, abstract 57, col. 5, lines 8-15).

39. As per claim 39, Johnson discloses a method wherein those steps of encrypting a portion include steps of encrypting only packet payloads when the digital content format is one of the group: an MPEG encoding, a variant of an MPEG encoding (col. 4, lines 17-24).

40. As per claim 40, Johnson discloses a computer readable storage medium comprising to encode a media stream into a digital content format representing that

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media stream, the instructions to encode including elements directing that computing device to encrypt a portion of that digital content, less than the entire digital content format representing that media stream, the portion of the digital content that is encrypted being required for presentation of the media stream(Fig. 1, abstract 57, col. 2, lines 46-58); to not encrypt a portion of that digital content, less than the entire digital content format representing that media stream (Fig. 1, abstract 57, col. 5, lines 8-15). Johnson does not expressly disclose the portion of the digital content that is not encrypted being necessary and sufficient for conducting navigation operations on, without decrypting, the media stream represented by the digital content. However, Alve discloses the portion of the digital content that is not encrypted being necessary and sufficient for conducting navigation operations on, without decrypting, the media stream represented by the digital content (abstract, col. 4, lines 31-47).

The same motivation that was utilized in the combination of claim 1 applies equally as well to claim 40.

41. Claims 41-47 are listed all the same elements of claim 4, 11, 12-15 but in medium form rather than method form. Therefore, the supporting rationales of the rejection to claim 4, 11, 12-15 apply equally as well to claim 41-47.

42. As per claim 48, Johnson discloses a a computer readable storage medium to encode a media stream into a digital content format representing that media stream, that digital content format having a set of information nodes, those information nodes being disposed in at least a partial ordering; encrypt a portion of that digital content, the portion being encrypted less than the entire digital content format representing that

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media stream, the portion of the digital content that is encrypted being required for presentation of the media stream (Fig. 1, abstract 57, col. 2, lines 46-58); wherein the unencrypted portion of that digital content is substantially closed in a direction under that partial ordering (Fig. 1, abstract 57, col. 5, lines 8-15). Johnson does not expressly disclose whereby it is possible to navigate the encrypted portion of that digital content without having to decrypt it. However, Alve discloses whereby it is possible to navigate the encrypted portion of that digital content without having to decrypt it (abstract, col. 4, lines 31-47).

The same motivation that was utilized in the combination of claim 1 applies equally as well to claim 48.

43. Claims 49-50 are listed all the same elements of claim 12-13 but in medium form rather than method form. Therefore, the supporting rationales of the rejection to claim 12-13 apply equally as well to claim 49-50.

Conclusion

24. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

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calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad w. Reza whose telephone number is 571-272-6590. The examiner can normally be reached on M-F (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **MOAZZAMI NASSER G** can be reached on (571)272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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